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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,272	09/26/2003	Uwe D. Schaible	PAT 52154-2	4940

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EXAMINER	
GILL, ERIN M	

ART UNIT	PAPER NUMBER
2881	

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/670,272	SCHAIBLE ET AL.	
	Examiner	Art Unit	
	Erin-Michael Gill	2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/12/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 11-14, and 21-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Baarman et al. US Patent No. 6436299 (hereafter Baarman). Taken as a whole this document teaches all of the limitations of the aforementioned claims. The claims will be repeated below with specific references to Baarman made parenthetically. Duplicate elements in succeeding claims will not be repeated. Regarding claim 1, Baarman teaches an ultraviolet (UV) fluid treatment system for small enterprise and consumer use, comprising a fluid treatment zone having a fluid inlet (reference number 32) and a fluid outlet (reference number 34), a UV emitter (reference number 60) mounted within the fluid treatment zone; a sensor unit disposed within the fluid treatment zone, the sensor unit including at least fluid flow sensing means (reference number 104) to sense fluid flow within the fluid treatment zone and UV sensing means to sense UV light levels, an intelligent driver (reference number 102) for receiving a fluid flow indication and a UV light level indication from the sensor unit, and for controlling operation of the UV emitter in response to at least one of the fluid flow indication and the UV light level indication; and an indicator (reference number 106) in communication with the intelligent driver for providing a user with information related to operation of the fluid treatment system.

3. Regarding claim 2, Baarman teaches the UV fluid treatment system of claim 1, wherein the UV emitter is a mercury vapor lamp (reference numbers 300, 302).

4. Regarding claim 3, Baarman Figure 1 teaches the UV fluid treatment system of claim 1, wherein the sensor unit is self-contained within a housing.

5. Regarding claim 4, Baarman Figure 3 teaches the UV fluid treatment system of claim 1, wherein the sensor unit is remote from the UV emitter.

6. Regarding claims 11 and 12, Baarman teaches the UV fluid treatment system of claim 1, wherein the intelligent driver includes a lamp driver circuit under control of a ballast microprocessor, wherein the ballast microprocessor is reprogrammable (reference number 103).

7. Regarding claim 24, Baarman teaches the intelligent driver of claim 21, including an alarm for indicating system malfunction to a user (reference number 116).

8. Regarding claim 25, Baarman teaches the intelligent driver of claim 21, including a safety interlock for detecting improper connection of the UV emitter (reference number 308).

9. Regarding claim 27 the intelligent driver of claim 21, wherein the indicator includes a display for displaying at east one of text and graphics (reference number 106).

10. The limitations of claims 13, 14, 21, 22, 23, 26 have been previously addressed.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 5-10 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baarman in view of Cohen US Patent Number 6317051 (hereafter Cohen). Baarman teaches all of the limitations of independent claims 1 and 13 as stated above, however fails to teach the inclusion of sound/vibration sensing means within the fluid treatment zone in combination with the intelligent driver structure of the intervening claims. Cohen teaches the inclusion of the sound/vibration detector (Figure 1 reference number 16) being connected to a controller system (figure 1 reference number 22) in a water flow monitoring system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the apparatus of Cohen within the system on Baarman because for the purpose of fluid flow monitoring, a sound/vibration detector systems connected to a controller system was well known in the art to produce improved fluid flow monitoring.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erin-Michael Gill whose telephone number is 571-272-2471. The examiner can normally be reached on M-F (8:30-5:00 EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EMG

JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800